

SOFTWARE DEFINABLE BLOCK ADAPTIVE DECISION FEEDBACK
EQUALIZER

ABSTRACT OF THE DISCLOSURE

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A block decision feedback equalizer is designed by deriving, from first principles, a block exact decision feedback equalizer and then systematically applying simplifying assumptions to obtain several block approximate decision feedback equalizers, each suitable for multipath channel equalization and having error convergence insensitive to filter length. The resulting block decision feedback equalizer is software definable may be dynamically adapted by choosing whether to update error correction coefficients.

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